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Who is nutritionally vulnerable in Bosnia-Hercegovina?

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Abstract

Objective—To monitor nutritional status and food security in order to identify nutritionally vulnerable groups.

Design—Members of five different household groups (urban and rural residents, displaced people in collective centres and private accommodation, elderly people living without younger family) and all residents of two old people's homes were prospectively followed. Households were selected from 20 local communities and nine collective centres.

Setting—Monitoring carried out in three besieged areas of Bosnia-Hercegovina (Sarajevo, Tuzla, and Zenica).

Subjects—1739 individuals sampled.

Interventions—Data collected every month from December 1993 to May 1994. Information on household food security was collected through structured questionnaires. All subjects were weighed and their heights measured. Weight for age Z scores were calculated for children; body mass index was calculated for adults and elderly people.

Results—From December 1993 to February 1994, before a temporary cease fire, access to food was reduced. In February 1994 no significant signs of undernutrition were detected among children or adults, but elderly people had higher than expected levels of undernutrition (15·5% with body mass index <18·5), a higher rate of weight loss than adults (1·2 kg over two months), and a higher prevalence of self reported illness.

Conclusions—Elderly people in Bosnia-Hercegovina are at greater risk of undernutrition than other age groups. Undernutrition may be precipitated in elderly people by sickness, cold, stress, and problems related to food preparation. The health and welfare of elderly people during the emergency in Bosnia-Hercegovina require special attention, and integrated age care programmes are needed.

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Introduction

Bosnia-Hercegovina entered the third year of war in April 1995. Populations in besieged areas continue to be subjected to constant bombardment, an uncertain food supply, disruption of power and water supplies, a depressed economy, and shrinking financial and physical reserves.

Humanitarian food aid began to flow into Bosnia-Hercegovina at the end of 1992 but supply routes have been fraught with logistical problems. In the second half of 1993, only 16-69% of estimated monthly food aid requirements were delivered to central Bosnia (where Zenica and Tuzla are located) and 62-94% to Sarajevo. In February 1994 as a result of the declared cease fire there was a temporary lessening of hostilities and an improvement in food supply as blockades were lifted and humanitarian and commercial traffic was resumed.

Priorities for humanitarian aid agencies in emergency situations are to detect and prevent increased morbidity and mortality and to identify and protect those at nutritional and health risk. In response to a need for objective information, the World Health Organisation implemented a nutrition and food security monitoring system in three besieged cities in Bosnia-Hercegovina (Sarajevo, Tuzla, and Zenica) between December 1993 and May 1994. The aims were to detect early signs of deterioration in nutritional status and access to food and to identify those who were most severely affected.

Methods

Five distinct household groups (groups of people who usually live and eat together) were identified who potentially differed in terms of vulnerability to insecure food supplies. These were urban residents, rural residents, displaced people living in private accommodation, displaced people living in collective centres, and elderly people living alone (without younger family or friends).

Sample size was calculated on the basis of a population of 280 000 (the estimated population of Sarajevo) and assumptions of a prevalence of 7% adult undernutrition (body mass index <18.5) with an unacceptable level of 14%. Using EPI-INFO software for population or descriptive studies,[1] a minimum sample size of 102 adults at 5% significance was calculated. On the

with international figures. General practitioners in Finland know their patients' diseases, drug treatment, and home circumstances. They and their team take responsibility for monitoring their patients' anticoagulant treatment and accept this division of work, as do specialists and the patients.

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Telephone interpreting service is available

EDITOR,—I am surprised that Michael Phelan and Sue Parkman's article on working with an interpreter does not mention telephone interpreting, a unique service was pioneered in Britain by Language Line in 1990. After a trial at the Royal London Hospital, Language Line's telephone interpreting service is now used daily in 15% of NHS trusts nationwide, including major teaching hospitals such as King's College Hospital as well as specialist centres such as Great Ormond Street Hospital. Health care providers using this service are increasing rapidly.

Phelan and Parkman's article outlines many areas in which the four types of interpreting identified that by bilingual health workers, trained interpreters, friends and relatives, and untrained volunteers often fail to meet basic needs. A scarcity of the first two types of interpreting means that professional resources are often not available when and where needed. Use of the last two types leads to the risk of partiality and lack of confidentiality.

Telephone interpreting services provide solutions to these problems. Firstly, they are immediate and accessible. Our trained interpreters, who are fluent in more than 140 languages, can be on line in around 90 seconds, day and night. Thus, whatever the location, interpreters can be reached quickly and easily, which saves vital time and resources. Immediacy relieves stress for both the medical professional and the person who does not speak English. Communication is therefore possible in situations in which the professional is unable to plan ahead. Secondly, telephone interpreting services offer impartiality and confidentiality. Our telephone interpreters abide by a strict code of ethics, which emphasises accuracy, impartiality, and confidentiality. Furthermore, the anonymity of our interpreter often facilitates a freer exchange of information, especially where personal, embarrassing, or sensitive matters are concerned.

While a telephone interview conducted through our interpreter is structured in much the same way as a face to face interview, health care professionals should be advised that as there is no visual contact with the patient they must provide information orally.

Telephone interpreting is not a replacement for the vital work done by bilingual health workers and face to face interpreters, but it fills in the gaps when these resources are not available. It also means that those who provide services never need to use inadequate, ad hoc resources. Language Line's unique, nationwide telephone interpreting service therefore merits inclusion in the appendix of useful addresses at the end of Phelan and Parkman's article.

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1 Phelan M, Parkman S. How to work with an interpreter. BMJ 1995;311:555-7. (26 August.)

Cancer among airline cabin attendants

Risk due to active and passive smoking should have been mentioned

EDITOR,—In their comprehensive study Eero Pukkala and colleagues found that Finnish airline cabin attendants had a significantly increased risk of breast and bone cancer and a non-significant trend (too few cases?) towards some other cancers. The analysis included exposure to radiation, some lifestyle factors, and reproductive history. For some reason the authors omitted cigarette smoking, both active and passive, which may have a role in their findings.

It is well known that smoking increases the risk of cancer in various organs. An association between smoking and breast cancer has been considered not to exist or to be weakly positive, but it may be fairly considerable. Most non-smoking travellers have noticed the nuisance of cigarette smoke in aircraft, especially in the rear, where the seats are usually reserved for smokers. In many aircraft the kitchens are also in the rear, and consequently the flight attendants have to spend a lot of flight time in an area polluted with smoke.

The magnitude of the risk of cancer caused by passive smoking is not known but may be proportional to the amount of smoke inhaled. Although measuring the amount of smoke inhaled is difficult, if not impossible, the risk of cancer caused by both active and passive smoking should at least have been mentioned.

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Interpretation of study minimises occupational hazards

EDITOR,—Eero Pukkala and colleagues report a standardised incidence ratio of 10·7 for breast cancer and 3·57 for leukaemia among Finnish airline cabin attendants. Most other ratios reported are also raised beyond unity. Yet the study makes no correction for the healthy worker effect, which can halve the incidence of morbidity in a given population. The interpretation therefore minimises what seem to be significant occupational hazards. The researchers note, even so, that the observed risk ratios are much higher than would be expected on the basis of present estimates of health hazards based on studies of survivors of the atomic bombs. I have conducted a study showing that these studies are far from robust, and we do ourselves a disservice by continuing to depend on them 40 years on.

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1 Pukkala E, Auvinen A, Wahlberg G. Incidence of cancer among Finnish airline cabin attendants, 1967-92. BMJ 1995;311:649-52. (9 September.)
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Authors' reply

EDITOR,—Rainer Fogelholm suggests that exposure to environmental tobacco smoke might explain the increased risk of breast cancer that we found among Finnish flight attendants. The possible effect of passive smoking was one of the concerns among flight attendants that prompted us to conduct the study. We considered passive smoking mainly as a risk factor for lung cancer. The fact that no clear increase was observed in the incidence of lung cancer and other cancers related to smoking (although the confidence intervals were relatively wide) suggests that the cabin crew did not smoke more than average and that passive smoking is not a major problem in this cohort.

Smoking is the leading cause of cancer in industrialised countries. We did not, however, consider passive smoking to be a potential explanation for the increased risk of breast cancer because the evidence regarding cigarette smoking as a risk factor for breast cancer is weak and inconsistent. Most reliable evidence on the subject is available from large cohort studies with detailed smoking histories obtained before the occurrence of the disease. Studies such as the nurses' health study and the Framingham heart study have failed to show any association between cigarette smoking and breast cancer.[2,3] Furthermore, a reduction in the risk of breast cancer among smokers has been reported in cohort studies as frequently as an increase.[4] There are also several case-control studies on the subject, but they have generally not shown an increased risk of breast cancer among smokers.[4]

We are aware of only one study directly assessing the effect of passive smoking on the risk of breast cancer.[5] Its results do not show any increase in risk. Two previous reports were based on breast cancer among women married to smokers but did not assess exposure in detail.[4] With scarce evidence for the effect of active smoking, the relation between passive smoking and breast cancer is unlikely to be the subject of intense research.

In summary, we find it unlikely that exposure to tobacco smoke could account for the increased risk of breast cancer among Finnish flight attendants. We agree with Fogelholm, however, that several factors might explain the excess risk. The aim of our study was to detect a possible increase in risk. More detailed analyses are needed to identify the causal factors.

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